

REMARKS

As a preliminary matter, Applicants appreciate the Examiner's indication that Claim 29 is allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. For the reasons discussed below, Applicants have not rewritten Claim 29 at this time.

Regarding Amendment A filed on September 13, 2001, Applicants submitted copies of lost references cited in the IDS filed on October 21, 1999 and October 22, 1999 along with a copy of the PTO form 1449. Applicants respectfully request that the Examiner send the Applicants an initialed copy of the submitted PTO form 1449.

Changes to the specification are shown in the attached Appendix A ("VERSION WITH MARKINGS TO SHOW CHANGES MADE") with deletions in brackets and additions underlined.

The Examiner reminded the Applicants to up-date the status of the referred to co-pending applications. The specification has been revised to indicate the status of the co-pending applications.

Claims 10, 11, 12, 14-16, 31, 32, 40, 41 stand rejected under 35 USC § 112, first paragraph. With respect to Claims 10, 11, 14-16, 31, and 40, the Office Action states that the specification does not contain language to support "the second circuit comprises at least one relay." The Examiner is referred to page 25, lines 20-21 of the application. The specification describes that output states of the I/O device according to the current invention are "utilized by relay hardware, for example, to turn a load on or off." One skilled in the art would know that a relay is an (electric) circuit. With respect to Claims 12, 32 and 41, the Office Action states that the specification does not contain language to support "the second electrical circuit carries a second signal between 4mA to 20mA." The Examiner is referred to the current application on page 3, lines 16-20 for a discussion of the use of 4mA to 20mA signals with analog inputs and outputs. One skilled in the art would know that an electrical circuit could carry the 4mA to 20mA.

Independent Claims 1, 8, 26, 38 and 47 stand rejected under 35 U.S.C. §102(e) as being anticipated by Lightbody et al. (U.S. Patent No. 6,000,034). Each of these independent claims recites an I/O device that is physically separate from a revenue

meter. Applicants respectfully traverse this rejection because Lightbody et al. fails to disclose or suggest the claimed "I/O device."

Claims 1, 8, 26 and 47 claim a separate I/O device that is connected to a revenue meter via an interface link. Claim 38 claims a method of locating an I/O device external to a revenue meter and connecting an interface link between the I/O device and the revenue meter. The I/O device is an input and output device that communicates I/O signals indicative of its input states and for controlling its output states. For example, a digital I/O device may communicate information indicative of on and off states and an analog I/O device may communicate information indicative of the amperage of a signal.

Conversely, Lightbody et al. discloses a security system for a revenue meter. In the description of the device capable of implementing the security system, characteristics of a revenue meter are disclosed. One of these characteristics is the ability of the revenue meter 10 to communicate over various communications interfaces (22, 71, 73) to external devices, including a user interface portion 20 (Col. 4, lines 28-36), a network 72 (Col. 5, lines 4-7), and a personal computer 74 (Col. 5, lines 7-10). Devices 20, 72 and 74 may be used to facilitate programming of the revenue meter (Col. 9, lines 21-24; Col. 10, lines 58-61; Col. 11, lines 5-7) and to monitor the operation of the revenue meter (Col. 6, lines 53-65). However, Lightbody fails to disclose or suggest that any of these external devices includes an I/O device, which communicates I/O signals, according to the claimed invention. Moreover, Lightbody et al. specifically discloses a revenue meter that contains internal I/O circuitry, not external (Fig. 5, element 149). Therefore, Lightbody et al. fails to disclose or suggest the claimed separate or external I/O device.

In addition, regarding Claims 1, 26 and 47, Lightbody et al. fails to disclose or suggest the feature "wherein said I/O and communications device connects to at least one second electric circuit." Also, regarding Claims 8 and 47, ports 23 and 70 in Lightbody et al. are disposed on the revenue meter 10 of Lightbody et al. (see Fig. 1, items 23 and 70) and are therefore not the claimed "connector located on said I/O and communications device".

Thus, for at least these reasons, Applicants respectfully submit that the rejection over Lightbody et al. of independent Claims 1, 8, 26, 38 and 47 be withdrawn.

Dependent Claims 2, 9, 13, 17, 19-22, 24, 27, 33-35, 37, 39, 45, 46, 48-51 depend from their respective independent claims and thus include all of the features of those claims plus additional features. The dependent claims should be allowed for the reasons set forth for the respective independent claims above. In addition, regarding Claim 34, Lightbody et al. discloses “[t]he user interface portion 20 includes one or more input panels 30, 32, 34, 36 and 38. Each of the input panels includes one or more key pads or buttons.” The input panels 30, 32, 34, 36 and 38 are an inherent part of the user interface 20 and therefore are not “external contacts” as claimed in Claim 34. Also, regarding Claims 48 and 49, ports 70 and 23 of Lightbody et al. are disposed on the revenue meter 10 of Lightbody et al., and are not “a second (or third) connector on said I/O and communications device,” as claimed.

Accordingly, Applicants respectfully request that the Examiner withdraw this rejection of dependent Claims 2, 9, 13, 17, 19-22, 24, 27, 33-35, 37, 39, 45, 46, 48-51.

Dependent Claims 3, 12, 18, 25, 28, 32, 36, 41, 42, 44 stand rejected as being obvious under 35 U.S.C § 103(a) in view of Lightbody et al. These dependent claims contain all the features of their respective independent claims plus additional features. For the reasons discussed above with regard to the independent claims, none of the references, either alone or in combination, disclose or suggest at least the separate or external I/O device. Nor would it have been obvious to one of ordinary skill in the art to include a separate or external I/O device.

Accordingly, for the reasons discussed above with respect to the independent claims, Applicants respectfully request that the Examiner withdraw the rejection of Dependent Claims 3, 12, 18, 25, 28, 32, 36, 41, 42, 44.

Dependent Claims 4-7, 23, 30, 43 stand rejected under 35 U.S.C. § 103(a) based on Lightbody et al. and further in view of Power Measurement ION 8500 (Direct Access Billing Meter, Quick Facts Sheet) submitted in the IDS. The ION 8500 is relied upon to show timestamping of event data and a bayonet terminal revenue meter mateable with matching jaws of a detachable meter mounting device and a draw out meter enclosure. These dependent claims contain all the features of their respective independent claims

plus additional features. For the reasons discussed above with regard to the independent claims, none of the references, either alone or in combination, disclose or suggest at least the separate or external I/O device. Nor would it have been obvious to one of ordinary skill in the art to include a separate or external I/O device.

Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of Dependent Claims 4-7, 23, 30, 43.

For all of the above reasons, Applicants respectfully request reconsideration and allowance of the present application. The Examiner is invited to contact the undersigned attorney at the below-listed number if there are any outstanding issues that could be resolved through a telephone conference.

Respectfully submitted,



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Appendix A
VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification

(Twice amended) On page 1, in the Cross Reference to Related Applications section, please delete the text from line 4 to line 28, and insert the following text thereof:

The following co-pending and commonly assigned U.S. patent applications have been filed on the same date as the present application. All of these applications relate to and further describe other aspects of the embodiments disclosed in the present application and are all herein incorporated by reference.

U.S. Pat. Application Ser. No. 09/370,317, "REVENUE METER WITH POWER QUALITY FEATURES", (Attorney Ref. No. 06270/22), filed August 9, 1999 (pending).

U.S. Pat. Application Ser. No. 09/371,883, "A-BASE REVENUE METER WITH POWER QUALITY FEATURES", (Attorney Ref. No. 06270/32), filed August 9, 1999 (pending).

U.S. Pat. Application Ser. No. 09/370,695, "REVENUE METER WITH GRAPHIC USER INTERFACE", (Attorney Ref. No. 06270/23), filed August 9, 1999 (pending).

U.S. Pat. Application Ser. No. 09/370,686, "REVENUE METER BLADE ASSEMBLY AND METHOD OF ATTACHMENT", (Attorney Ref. No. 06270/25), filed August 9, 1999, and issued as U.S. Patent No. 6,186,842 on February 13, 2001.

U.S. Pat. Application Ser. No. 09/370,863, "A POWER SYSTEM TIME SYNCHRONIZATION DEVICE AND METHOD FOR SEQUENCE OF EVENT RECORDING", (Attorney Ref. No. 06270/24), filed August 9, 1999 (pending).

U.S. Pat. Application Ser. No. 09/369,870, "METHOD AND APPARATUS FOR AUTOMATICALLY CONTROLLED GAIN SWITCHING OF POWER MONITORS", (Attorney Ref. No. 06270/27), filed August 9, 1999 (pending).

U.S. Pat. Application Ser. No. 09/370,757, "A KEYPAD FOR A REVENUE METER", (Attorney Ref. No. 06270/34), filed August 9, 1999 (pending).